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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/734,605	12/15/2003	Robert Richardson	41557-199416 RK	1489
26694	7590	07/07/2005	EXAMINER	
VENABLE LLP P.O. BOX 34385 WASHINGTON, DC 20045-9998			NGUYEN, MATTHEW VAN	
			ART UNIT	PAPER NUMBER
			2838	
DATE MAILED: 07/07/2005				

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No.

10/734,605

Applicant(s)

RICHARDSON ET AL.

Examiner

MATTHEW V. NGUYEN

Art Unit

2838

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 21 April 2005.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-11 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-11 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 15 December 2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some \* c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_

Art Unit: 2838

1. The Applicant's Response filed 4/21/05 has been entered and carefully considered. Arguments regarding the rejection 35 U.S.C 102(b) to claims 1, 3, 5 and 8-10 under the reference of Kino et al. are persuasive. However, all of the claims in the application are not found to be patentable under the prior art of Williams (U.S. Pat. No. 4,873,757). Therefore, those claims are rejected under the new ground of rejection as set forth below.

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 8-10 are rejected under 35 U.S.C. 102(b) as being anticipated by Williams.

With regard to claims 8-10, Williams (i.e. Fig. 23) shows a transformer comprising a primary winding (PY1), a secondary winding and a rectifier arrangement for rectifier voltage induced in the secondary winding including at least two coils (SY1-SY3), each coil including rectifier diode arrangement having a plurality of diodes arranged in parallel to one another, being connected to separate respective secondary windings (SY1, SY2, SY3), and each of the plurality of diodes and respective secondary windings being connected together in parallel (also see col. 6, lines 43-58).

Art Unit: 2838

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claim 11 is rejected under 35 U.S.C. 103(a) as being unpatentable over Williams in view of Koroncai et al. (U.S. Pat. No. 4,506,320).

With regard to claim 11, Williams shows a transformer arrangement comprising all the claimed subject matter as discussed above, except for the rectifier diode arrangement being arranged to cool the diodes.

Koroncai et al. discloses a power rectifier arrangement (i.e., Figs. 1-3) in which 4 diodes (1-4) are screwed into two heat sinks 11 (also col. 2, lines 45-56).

It would have been obvious to one having ordinary skill in the art at the time the invention was made to utilize the arrangement of the rectifier diodes connected to the heat sinks as shown in Koroncai et al. into the transformer arrangement of Williams. for the purpose of preventing overheating of the power rectifiers (col. 1, lines 35-37).

4. Claims 1-4 are rejected under 35 U.S.C. 103(a) as being unpatentable over Williams.

With regard to claims 1-4, Williams shows a transformer arrangement comprising all the claimed subject matter as discussed above, and moreover, each of the

Art Unit: 2838

coils being a single turn (col. 7, last line – col. 8, line 5), conductor paths (34, 36, Fig. 1) electrically connected to a printed circuit board (col. 7, lines 48-55).

Williams does not disclose the rectifier diode being as an integrated part of the coil. It would have been obvious to one having ordinary skill in the art at the time the invention was made to have the rectifier diode as an integrated part of the coil, since it has been held that forming in one piece an article which has formerly been formed in two pieces and put together involves only routine skill in the art.

*Howard v. Detroit Stove Works*, 150 U.S. 164 (1893).

5. Claims 5-7 are rejected under 35 U.S.C. 103(a) as being unpatentable over Williams in view of Teich et al. (U.S. Pat. No. 4,507,531).

With regard to claims 5-7, Kino et al. shows a transformer arrangement comprising all the claimed subject matter as discussed above, except for the transformer arrangement being operable at high voltage and used in supplying power to a pulsed magnetron heater.

Teich et al. discloses a power supply system (i.e., Fig. 2) in which a pulsed magnetron heater (12) (col. 9, line 42) being supplied power through a transformer (46) being operable at high voltage (col. 6, line 1).

It would have been obvious to one having ordinary skill in the art at the time the invention was made to combine the high voltage power supply system with the pulse magnetron heater at the load as shown in Teich et al. and the transformer

Art Unit: 2838

arrangement of Williams for the purpose of giving the apparatus of Williams an ability to supply power for the magnetron heater.

6. Any inquiry concerning this communication or earlier communications from the Examiner should be directed to Matthew V. Nguyen whose telephone number is (571) 272-2081.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the Group receptionist whose telephone number is (571) 272-2800.

*Matthew V. Nguyen*  
**MATTHEW V. NGUYEN**  
**PRIMARY EXAMINER**